

Model B 28 | Standard-Incubators with mechanical adjustment

With the B series incubator, you get a reliable and powerful unit in a solid configuration at a very attractive price.

BENEFITS

- Safe and reproducible results even under high batch throughputs in long-term operation
- Inner glass door for a stable atmosphere



Model 28



Model 28

IMPORTANT FEATURES

- Temperature range: +30 °C to +70 °C
- Hydro-mechanical thermostat
- Class 1 temperature limitation device
- Inner door made of tempered safety glass
- 2 chrome-plated racks

ORDERING INFORMATION

Interior volume		Power supply - unit fuse	Plug*	Version	Model version	Art.-No.
[L]	[L]					
Model B 28						
28	28	230 V 1~ 50/60 Hz -6,3 A	CEE 7/7	Standard	Bo28-230V	9010-0002
		120 V 1~ 60 Hz -6,3 A	NEMA 5-15	Standard	Bo28-120V	9010-0067

TECHNICAL DATA

Designation

Article Number

Option model

Temperature range

Temperature range without illumination cassettes

Temperature range with 100% illumination

Temperature uniformity dependent on set value

Temperature uniformity at -80°C

Temperature uniformity with 100% illumination

Temperature uniformity without illumination cassettes

Temperature uniformity at 37°C

Temperature uniformity at 100°C

Temperature uniformity at 150°C

Temperature fluctuation dependent on set value

Temperature fluctuation at -80°C

Temperature fluctuation at 37°C

Temperature fluctuation with 100% illumination

Temperature fluctuation without illumination cassettes

Temperature fluctuation at 100°C

Temperature fluctuation at 150°C

Heating up time to 100°C

Heating up time to 150°C

Heating up time to 37°C

Average heating-up rate according to IEC 60068-3-5

Cooling down time from 110°C to -40°C

Cooling down time from 180°C to -40°C

Cooling down time from 180°C to -70°C

Cooling down time from 22°C to -80°C

Average cooling down time according to IEC 60068-3-5

Max. heat compensation at 37°C

Max. heat compensation at 40°C

Max. heat compensation at 40°C with illumination

Recovery time after door was opened for 30 s at 150°C

Recovery time after door was opened for 30 s at 37°C

Temperature range with humidity and without illumination cassettes

Temperature range with humidity and 100% illumination

Temperature range with humidity

Humidity range

Humidity range without illumination cassettes

Humidity range with 100% illumination

Temperature uniformity at 25°C and 60% RH

Temperature uniformity at 40°C and 75% RH

Temperature uniformity with illumination at 25°C and 60% RH

Temperature uniformity with illumination at 40°C and 75% RH

Temperature uniformity with humidity dependent on set value

Temperature fluctuation at 25°C and 60% RH

Temperature fluctuation at 40°C and 75% RH

Temperature fluctuation with illumination at 25°C and 60% RH

Temperature fluctuation with illumination at 40°C and 75% RH

Temperature fluctuation with humidity dependent on set value

Humidity fluctuation at 25°C and 60% RH

Humidity fluctuation at 40°C and 75% RH

Humidity fluctuation with illumination at 25°C and 60% RH

Humidity fluctuation with illumination at 40°C and 75% RH

Humidity fluctuation with humidity dependent on set value

Recovery time after door was opened for 30 s at 25°C and 60% RH

Recovery time after door was opened for 30 s at 40°C and 75% RH

Recovery time after door was opened for 30 s with illumination at 25°C and 60% RH

Recovery time after door was opened for 30 s with illumination at 40°C and 75% RH

Max. heat compensation at 25°C and 90% RH

CO₂ range

CO₂ measuring technology

CO₂ recovery time after door was opened for 30 s at 5 vol. % CO₂

Standard O₂ control range

O₂ control ranges with option: O₂ range

O₂ recovery time after door was opened for 30 s at 5 vol. % O₂

ICH compliant illumination for photo stability testing

ICH compliant illumination for photo stability testing

Daylight tubes

Daylight tubes

Fluora® growth lamps

Arabidopsis lamps

Air circulation (approx.)

Volumetric flow rate of exhaust air acc. to EN 1539 at 50 °C

Air change rate at 100°C

Air change rate at 150°C

Permitted end vacuum

Leckrate

Highest permitted solvent quantity (at T-180°C, M-100g/mol, U-40g/m³, K=0,5)

Rated Voltage

Power frequency

Nominal power

Unit fuse

Phase (Nominal voltage)

Vacuum connection with small flange

Measuring access port with small flange

Inert gas connection with flow limiter (RP*)

Compressed air connection for pressure-encapsulation

Interior volume

Net weight of the unit (empty)

Load per rack

Permitted load

Wall clearance back

Wall clearance sidewise

Width net

Height net

Depth net

Interior width

Interior height

Interior depth

Viewing window width

Viewing window height

Inner doors

Unit doors

Sound-pressure level

Average heat compensation at set value -80°C and $T_a = 21^\circ\text{C}$

Energy consumption at 25°C and 60% RH

Energy consumption at 100°C

Energy consumption at 150°C

Energy consumption at 20°C

Energy consumption at 37°C

Energy consumption at 37°C and 75% RH

Energy consumption at 37°C and with illumination

Energy consumption at 40°C and 75% RH

Energy consumption at 85°C and 85% RH

Energieverbrauch bei Sollwert -80 °C und $T_u = 20$ °C

Number of shelves (std./max.)

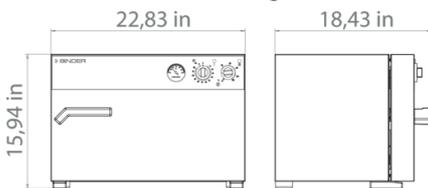
Number of illumination cassettes (std./max.)

Freezer racks per compartment

Cryoboxes, 50 mm

All technical data is specified for unloaded units with standard equipment at an ambient temperature of $+22$ °C ± 3 °C and a power supply voltage fluctuation of $\pm 10\%$. The temperature data is determined in accordance to BINDER factory standard following DIN 12880, observing the recommended wall clearances of 10 % of the height, width, and depth of the inner chamber. All indications are average values, typical for units produced in series. We reserve the right to change technical specifications at any time.

DIMENSIONS Incl. fittings and connections [mm]



OPTIONS

Designation	Description	B 28	*	Art.-No.
Calibration certificate, expanded	for temperature; for extending the measurement in center of chamber to include another test temperature	•	-	8012-0022
Calibration certificate, temperature	for temperature, measurement in center of chamber at specified temperature	•	-	8012-0030

ACCESSORIES

Designation	Description	B 28	*	Art.-No.
Rack	chrome plated	•	-	8012-2032
Rubber pads	set anti-slip feet	•	-	8012-0702
Shelf, perforated	Stainless steel	•	-	8012-2160
pH-neutral detergent	concentrated, for gentle remove of residual contaminants; 1 kg	•	-	8012-2250

SERVICES

Designation	Description	*	Art.-No.
Calibration services			
Temperature calibration	Extension of calibration of one (1) additional test temperature specified by the user in the center of the usable space, including certificate Travel to be quoted separate.	-	DL30-0102
Installation services			

Designation	Description	*	Art.-No.
Unit installation	Connect the unit to the customer-side connections (electricity, water, wastewater, gas), basic functions check, brief operating instructions. (excl.: unpacking, setup, controller instructions, programming, installation work) Travel to be quoted as separate.	–	DL10-0100
Unit instructions	Instruction regarding operating principle and basic functions of the unit, operation of the control electronics including programming. Travel to be quoted as separate Limited to 3 hours.	–	DL10-0500
Warranty service			
1-year warranty extension	The warranty is extended by 1 year from the delivery date, wear parts are excluded	–	DL50-0010

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